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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/507,199 | Applicant(s) HICKMAN, ANDREW JAMES | |
| | Examiner Kimberly Lovel | Art Unit 2167 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-8 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to the Amendment filed 27 August 2007.
2. Claims 1, 3-8 and 10-18 are currently pending. In the Amendment filed 27 August 2007, claims 1, 3, 6-8, 15 and 17 were amended and claims 2 and 9 were canceled. This action is made Final.
3. The rejections of claims 1-3, 6-10, 13 and 14 as being anticipated by US PGPub 2003/0110242 to Brown et al; claims 4, 5, 11 and 12 as being unpatentable over US PGPub 2003/0110242 to Brown et al as applied to respectively to claims 3 and 10 above, and further in view of US PGPub 2003/0061206 to Qian; and claims 15-18 as being unpatentable over US PGPub 2003/0110242 to Brown et al in view of US PGPub 2003/0061206 to Qian have been withdrawn as necessitated by amendment.

Specification

4. Since the 37 CFR 1.77(b) states that the specification "should" include headings instead of stating that it has to, the objection to the disclosure has been withdrawn as necessitated by applicant's arguments.

Claim Objections

5. The objections to **claims 1, 8, 15 and 17** are withdrawn as necessitated by amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 6-8, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2002/0174117 to Nykanen (hereafter Nykanen) in view of US PGPub 2002/0188589 to Salmenkaita et al (hereafter Salmenkaita).

Referring to claim 1, Nykanen discloses a method for automatically discovering web services comprising:

querying a known Universal Description Discovery and Integration (UDDI) server address periodically, without user intervention, by a networked lightweight embedded Consumer Electronics (CE) device [WAP-enabled portable wireless device 100] (see [0033], lines 7-10) via a structured UDDI query (see [0061]), wherein the structured UDDI query includes the use of a unique identity [tModel] indicative that a web service is technically compliant with a particular web service standard interface which is supported and understood by the networked lightweight embedded CE device (see [0069]), the known UDDI server at the UDDI server address containing a list of web services, and further wherein the list of web services includes one or more service types of distinct web services new to and previously unknown by the networked lightweight embedded CE device [updated since the user's last query] (a) that are technically

compliant with the particular web service standard interface and (b) which can be used by the networked lightweight embedded CE device to implement at least one of b(i) providing data to the networked lightweight embedded CE device and b(ii) enhancing a functionality of the networked lightweight embedded CE device (see [0079]-[0082]);

identifying from said list in response to the structured UDDI query the technically compliant distinct web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the identifying is performed at the UDDI server (see [0080] and [0082]); and

automatically downloading via a structured response from the UDDI server to the networked lightweight embedded CE device at least one machine readable description of a distinct web service from the list of identified technically compliant web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the at least one machine readable description enables the networked lightweight embedded CE device to offer a greater choice of web services to a device user (see [0082]).

Nykanen fails to explicitly disclose the further limitation of querying the UDDI server without user intervention. Salmenkaita discloses the discovery of new web sites by searching the UDDI registry (see [0150]), including the further limitation wherein the query is sent without user intervention [the device is programmed to automatically get the current state] (see [0060]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the steps of automatically querying the registry disclosed by

Salmenkaita with the process of querying the registry disclosed by Nykanen. One would have been motivated to do so in order to increase user capability by providing all available services to the user.

Referring to claim 3, the combination of Nykanen and Salmenkaita (hereafter Nykanen/Salmenkaita) discloses a method according to claim 1, wherein said querying comprises transmitting a query in a predefined format, and wherein said structured query further contains a specific request, limiting the type of compliant web service identified [returning information that matches the supplied search criteria] (Nykanen: see [0061]).

Referring to claim 6, Nykanen/Salmenkaita discloses a method according to claim 3, and further comprising responding to said querying with a response comprising the list of compliant web services limited according to the specific request [businessList result] (Nykanen: see [0061], lines 13-18 and [0077]).

Referring to claim 7, Nykanen/Salmenkaita discloses a method according to claim 6, and further comprising selecting via said networked lightweight embedded CE device a web service from said list of compliant web services limited according to the specific request and communicating the selected web service to said UDDI server address (Nykanen: see [0077], lines 14-16).

Referring to claim 8, Nykanen discloses an apparatus for automatically discovering web services comprising:

communicating means for querying a known Universal Description Discovery and Integration (UDDI) server address periodically, without user intervention, by a

networked lightweight embedded Consumer Electronics (CE) device [WAP-enabled portable wireless device 100] (see [0033], lines 7-10) via a structured UDDI query (see [0061]), wherein the structured UDDI query includes the use of a unique identity [tModel] indicative that a web service is technically compliant with a particular web service standard interface which is supported and understood by the networked lightweight embedded CE device (see [0069]), the known UDDI server at the UDDI server address containing a list of web services, and further wherein the list of web services includes one or more service types of distinct web services new to and previously unknown by the networked lightweight embedded CE device [updated since the user's last query] (a) that are technically compliant with the particular web service standard interface and (b) which can be used by the networked lightweight embedded CE device to implement at least one of b(i) providing data to the networked lightweight embedded CE device and b(ii) enhancing a functionality of the networked lightweight embedded CE device (see [0079]-[0082]);

identifying from said list in response to the structured UDDI query the technically compliant distinct web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the identifying is performed at the UDDI server (see [0080] and [0082]); and

automatically downloading via a structured response from the UDDI server to the networked lightweight embedded CE device at least one machine readable description of a distinct web service from the list of identified technically compliant web services of one or more service types new to and previously unknown by the networked lightweight

embedded CE device, wherein the at least one machine readable description enables the networked lightweight embedded CE device to offer a greater choice of web services to a device user (see [0082]).

Nykanen fails to explicitly disclose the further limitation of querying the UDDI server without user intervention. Salmenkaita discloses the discovery of new web sites by searching the UDDI registry (see [0150]), including the further limitation wherein the query is sent without user intervention [the device is programmed to automatically get the current state] (see [0060]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the steps of automatically querying the registry disclosed by Salmenkaita with the process of querying the registry disclosed by Nykanen. One would have been motivated to do so in order to increase user capability by providing all available services to the user.

Referring to claim 10, Nykanen/Salmenkaita discloses an apparatus according to claim 8, wherein said communicating means queries said UDDI server address by transmitting the structured query in a predefined format and wherein said communicating means is further arranged to include in said structured query a specific request, thereby limiting the type of compliant web service identified [returning information that matches the supplied search criteria] (Nykanen: see [0061]).

Referring to claim 13, Nykanen/Salmenkaita discloses an apparatus according claim 8, and further comprising a user interface for displaying information and for receiving user instructions [user wireless device 100] (Nykanen: see Fig 1).

Referring to claim 14, Nykanen/Salmenkaita discloses an apparatus according to claim 13, wherein said user interface is arranged to display the list of compliant web services and to receive a user selection of one or more of the displayed compliant web services [user wireless device 100] (Nykanen: see Fig 1).

7. Claims 4, 5, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2002/0174117 to Nykanen in view of US PGPub 2002/0188589 to Salmenkaita et al as applied to respectively to claims 3 and 10 above, and further in view of US PGPub 2003/0061206 to Qian (hereafter Qian).

Referring to claims 4 and 11, while Nykanen/Salmenkaita discloses a structured query, Nykanen/Salmenkaita fails to explicitly disclose the further limitation wherein said structured query contains a request for TV Anytime services, said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform. Qian teaches said structured query contains a request for TV Anytime services (See page 3, paragraph [0037] "The descriptor/metadata may follow some well known standards. Examples of these standards include...TV-Anytime metadata..."); said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform (See page 3, paragraph [0031] "Any content that does not match with the personal preference information is ignored or discarded. Those that satisfy the preference criteria or match with the personal preference information are sent to the

content assembler.” And see page 3, paragraph [0036] where different taxonomies relating to content format, etc are discussed.)

It would have been obvious to one with ordinary skill in the art to combine the teaching of Nykanen/Salmenkaita with that of Qian because, as Qian suggests, any number of well-known standards could be used in the discovery of web services, and there is useful commercial applicability for TV-Anytime in particular with these types of CE devices. It is for this reason that one of ordinary skill in the art would have been motivated to include said structured query contains a request for TV Anytime services, said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform.

Referring to claim 5, the combination of Nykanen/Salmenkaita and Qian (hereafter Nykanen/Salmenkaita/Qian) discloses a method according to claim 4, wherein said set of taxonomies is at least one of authority name, broadcast service, genre [The preferences include contextual preferences regarding the content the user wishes to receive from the media source...favorite topics, news, sports news...The user may also provide preferences for content delivery such as time to download, desired quality of service, etc.], content format, service usage rights, table types and queryable fields (Qian: see [0018]).

Referring to claim 12, Nykanen/Salmenkaita/Qian discloses an apparatus according to claim 11, wherein said set of taxonomies is at least one of authority name, broadcast service, genre [The preferences include contextual preferences regarding the content the user wishes to receive from the media source...favorite topics, news, sports

news...The user may also provide preferences for content delivery such as time to download, desired quality of service, etc.”], content format, service usage rights, table types and queryable fields (Qian: see [0018]).

8. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2002/0174117 to Nykanen in view of US PGPub 2002/0188589 to Salmenkaita et al in view of US PGPub 2003/0061206 to Qian.

Referring to claim 15, Nykanen discloses a method for automatically discovering web services comprising:

querying a known Universal Description Discovery and Integration (UDDI) server address periodically, without user intervention, by a networked lightweight embedded Consumer Electronics (CE) device [WAP-enabled portable wireless device 100] (see [0033], lines 7-10) via a structured UDDI query (see [0061]), wherein the structured UDDI query includes the use of a unique identity [tModel] indicative that a web service is technically compliant with a particular web service standard interface which is supported and understood by the networked lightweight embedded CE device (see [0069]), the known UDDI server at the UDDI server address containing a list of web services, and further wherein the list of web services includes one or more service types of distinct web services new to and previously unknown by the networked lightweight embedded CE device [updated since the user's last query] (a) that are technically compliant with the particular web service standard interface and (b) which can be used

by the networked lightweight embedded CE device to implement at least one of b(i) providing data to the networked lightweight embedded CE device and b(ii) enhancing a functionality of the networked lightweight embedded CE device (see [0079]-[0082]);

identifying from said list in response to the structured UDDI query the technically compliant distinct web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the identifying is performed at the UDDI server (see [0080] and [0082]); and

automatically downloading via a structured response from the UDDI server to the networked lightweight embedded CE device at least one machine readable description of a distinct web service from the list of identified technically compliant web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the at least one machine readable description enables the networked lightweight embedded CE device to offer a greater choice of web services to a device user (see [0082]).

Nykanen fails to explicitly disclose the further limitation of querying the UDDI server without user intervention. Salmenkaita discloses the discovery of new web sites by searching the UDDI registry (see [0150]), including the further limitation wherein the query is sent without user intervention [the device is programmed to automatically get the current state] (see [0060]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the steps of automatically querying the registry disclosed by Salmenkaita with the process of querying the registry disclosed by Nykanen. One

would have been motivated to do so in order to increase user capability by providing all available services to the user.

Nykanen/Salmenkaita fails to explicitly disclose the further limitations wherein the web services are TV Anytime web services and wherein said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform. Qian discloses discovering web services, including the further limitations wherein the web services are TV Anytime web services [The descriptor/metadata may follow some well known standards. Examples of these well known standards include ... TV-Anytime metadata ...] (see [0037]) and wherein said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform [Any content that does not match with the personal preference information is ignored or discarded. Those that satisfy the preference criteria or match with the personal preference information are sent to the content assembler.] (see [0031] and [0036]).

It would have been obvious to one with ordinary skill in the art to combine the teaching of Nykanen/Salmenkaita with that of Qian because as Qian suggests, any number of well-known standards could be used in the discovery of web services, and there is useful commercial applicability for TV-Anytime in particular with these types of CE devices. It is for this reason that one of ordinary skill in the art would have been motivated to include said query contains a request for TV Anytime services, said query further including an element specifying a set of taxonomies to which said service must conform.

Referring to claim 16, Nykanen/Salmenkaita/Qian discloses a method according to claim 15, wherein said set of taxonomies is at least one of authority name, broadcast service, genre [The preferences include contextual preferences regarding the content the user wishes to receive from the media source...favorite topics, news, sports news...The user may also provide preferences for content delivery such as time to download, desired quality of service, etc.], content format, service usage rights, table types and queryable fields (Qian: see [0018]).

Referring to claim 17, Nykanen discloses an apparatus for automatically discovering web services comprising:

communicating means for querying a known Universal Description Discovery and Integration (UDDI) server address periodically, without user intervention, by a networked lightweight embedded Consumer Electronics (CE) device [WAP-enabled portable wireless device 100] (see [0033], lines 7-10) via a structured UDDI query (see [0061]), wherein the structured UDDI query includes the use of a unique identity [tModel] indicative that a web service is technically compliant with a particular web service standard interface which is supported and understood by the networked lightweight embedded CE device (see [0069]), the known UDDI server at the UDDI server address containing a list of web services, and further wherein the list of web services includes one or more service types of distinct web services new to and previously unknown by the networked lightweight embedded CE device [updated since the user's last query] (a) that are technically compliant with the particular web service standard interface and (b) which can be used by the networked lightweight embedded

CE device to implement at least one of b(i) providing data to the networked lightweight embedded CE device and b(ii) enhancing a functionality of the networked lightweight embedded CE device (see [0079]-[0082]);

identifying from said list in response to the structured UDDI query the technically compliant distinct web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the identifying is performed at the UDDI server (see [0080] and [0082]); and

automatically downloading via a structured response from the UDDI server to the networked lightweight embedded CE device at least one machine readable description of a distinct web service from the list of identified technically compliant web services of one or more service types new to and previously unknown by the networked lightweight embedded CE device, wherein the at least one machine readable description enables the networked lightweight embedded CE device to offer a greater choice of web services to a device user (see [0082]).

Nykanen fails to explicitly disclose the further limitation of querying the UDDI server without user intervention. Salmenkaita discloses the discovery of new web sites by searching the UDDI registry (see [0150]), including the further limitation wherein the query is sent without user intervention [the device is programmed to automatically get the current state] (see [0060]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the steps of automatically querying the registry disclosed by Salmenkaita with the process of querying the registry disclosed by Nykanen. One

would have been motivated to do so in order to increase user capability by providing all available services to the user.

Nykanen/Salmenkaita fails to explicitly disclose the further limitations wherein the web services are TV Anytime web services and wherein said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform. Qian discloses discovering web services, including the further limitations wherein the web services are TV Anytime web services [The descriptor/metadata may follow some well known standards. Examples of these well known standards include ... TV-Anytime metadata ...] (see [0037]) and wherein said structured query further including an element specifying a set of taxonomies to which said identified compliant web service must conform [Any content that does not match with the personal preference information is ignored or discarded. Those that satisfy the preference criteria or match with the personal preference information are sent to the content assembler.] (see [0031] and [0036]).

It would have been obvious to one with ordinary skill in the art to combine the teaching of Nykanen/Salmenkaita with that of Qian because as Qian suggests, any number of well-known standards could be used in the discovery of web services, and there is useful commercial applicability for TV-Anytime in particular with these types of CE devices. It is for this reason that one of ordinary skill in the art would have been motivated to include said query contains a request for TV Anytime services, said query further including an element specifying a set of taxonomies to which said service must conform.

Referring to claim 18, Nykanen/Salmenkaita/Qian discloses an apparatus according to claim 17, wherein said set of taxonomies is at least one of authority name, broadcast service, genre [The preferences include contextual preferences regarding the content the user wishes to receive from the media source...favorite topics, news, sports news...The user may also provide preferences for content delivery such as time to download, desired quality of service, etc.], content format, service usage rights, table types and queryable fields (Qian: see [0018]).

Response to Arguments

9. Applicant's arguments with respect to claims 1, 3-8 and 10-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly Lovel
Examiner
Art Unit 2167

9 November 2007
kml

John S. Wassum
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